# Bridge Preservation Program -- No. 500313

Transportation Category Agency

**Public Works & Transportation** Planning Area

Countywide

Previous PDF Page Number Required Adequate Public Facility

January 2, 2004 11-8(03 App)

Relocation Impact None.

## **EXPENDITURE SCHEDULE (\$000)**

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Cost Element	Total	Thru FY03	Est. FY04	Total 6 Years	FY05	FY06	FY07	FY08	FY09	FY10	Beyond 6 Years
Planning, Design	4.040	50	044	004	404	444	444	444	444	444	
and Supervision	1,248	53	311	884	164	144	144	144	144	144	L
Land											
Site Improvements											
and Utilities	2	2	0	0	0	0	0	0	0	0	C
Construction	4,137	98	1,186	2,853	1,053	360	360	360	360	360	(
Other				<del></del>							
Total	5,387	153	1,497	3,737	1,217	504	504	504	504	504	1
		L		FUNDING	3 SCHEDL	JLE (\$000)					
G.O. Bonds	4,521	0	1,497	3,024	504	504	504	504	504	504	(
Federal Aid	866	153	0	713	713	0	0	0	0	0	
4			ANNU	AL OPERAT	ING BUD	GET IMPA	CT (\$000)				

#### DESCRIPTION

This project provides for removal of corrosion and installation of protective coatings (paint) on existing County steel bridges that have been identified as needing surface recoating through the Biennial Bridge Inspection Program. Bridge preservation field operations include the removal of the existing coating system which may contain hazardous materials; containment of blast cleaning and waste paint particles; disposal of the hazardous materials at a pre-approved disposal site, as required by Maryland and Federal environmental regulations; installation of protective coating systems; and inspection to ensure compliance with environmental and contract requirements.

#### Service Area

Countywide

#### **JUSTIFICATION**

A biennial specialized study in paint surface preparation techniques, hazardous waste containment and disposal, paint products and application procedures, inspection and training criteria, and cost assessment is conducted through the Facility Planning: Bridges project to evaluate and test existing County bridges for inclusion in the Bridge Preservation Program. The study includes condition evaluation of existing bridges, need assessment, prioritization, cost estimates, and contract specification preparations. The benefits of this program will include extending the useful service life of existing steel bridges, prevention of long-term structural deficiencies, decreases in vehicle load restrictions, and reduced potential road closures and public inconvenience. The long-term goal of this program will be to protect existing bridges and keep them in good condition to reduce bridge renovation/replacement costs. The expected life cycle of a coating system is 15 years.

### Specific Data

The County currently has 113 steel girder and beam structures in its inventory of long-span and short-span bridges. The degree of specialized work required to restore the protective coatings to in-service bridges is beyond the scope of routine operations. Proper protective coating systems are an essential component of bridge maintenance to prevent long-term structural steel deterioration. Many defects identified through the Biennial Bridge Inspection Program are the direct result of bridges not being properly protected to withstand chemical and environmental elements. These defects include frozen and deteriorated steel bearings, corroded structural steel, and steel beam section loss.

## **Cost Change**

Increase due to addition of FY09 and FY10 to this ongoing project, higher than expected bid prices received for the first contract, and more detailed cost estimates for the second contract.

## **STATUS**

On-going.

## OTHER

There is a backlog of approximately 44 bridges that currently need painting and an additional 41 bridges that will require future painting. 13 non-Federal aid bridges were contracted in FY03 as the first contract of this project. The second contract, in FY04, will address another 15 bridges. Of these 15 bridges, 13 are eligible for up to 80 percent Federal aid. \*Expenditures will continue indefinitely.

Date First Appropriation	FY03	(\$000)
Initial Cost Estimate		4,967
First Cost Estimate		
Current Scope	FY05	5,387
Last FY's Cost Estimate		4,967
Present Cost Estimate		5,387
Appropriation Request	FY05	700
Appropriation Request Est.	FY06	504
Supplemental		
Appropriation Request	FY04	0
Transfer		0
Cumulative Appropriation		2,167
Expenditures/		
Encumbrances		705
Unencumbered Balance		1,462
Partial Closeout Thru	FY02	0
New Partial Closeout	FY03	0
Total Partial Closeout		0

### COORDINATION

Maryland Department of Natural Resources Department of Permitting Services Maryland-National Capital Park and Planning Commission Utilities CSX Transportation WMATA

Maryland State Highway Administration OSHA

FHWA - Federal Aid Bridge Bridge Renovation Program

